

CLAIMS

What is claimed is:

- 1 1. A method for providing a halo implant to a semiconductor device comprising
2 the steps of:
3 (a) providing a thin photoresist layer to the semiconductor device; and
4 (b) providing the halo implant to the appropriate area of the semiconductor
5 device.

- 1 2. The method of claim 1 wherein the thin photoresist layer covers a substantial
2 amount of the active area of the semiconductor device.

- 1 3. The method of claim 1 wherein the thin photoresist layer is between
2 approximately 0.1 to 0.2 μ m thick.

- 1 4. The method of claim 1 wherein the halo implant is at approximately a 45°
2 angle.

- 1 5. The method of claim 1 which includes the step of providing a lightly doped
2 drain implant before the halo implant providing step (b).

- 1 6. The method of claim 2 wherein the active area comprises the source region and
2 the drain region of the semiconductor device.

- 1 7. The method of claim 1 wherein the photoresist layer comprises a deep

2 ultraviolet (DUV) layer.

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8. A system for providing a halo implant to a semiconductor device comprising:
means for providing a thin photoresist layer to the semiconductor device; and
means for providing the halo implant to the appropriate area of the
semiconductor device.

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9. The system of claim 8 wherein the thin photoresist layer covers a substantial
amount of the active area of the semiconductor device.

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10. The system of claim 8 wherein the thin photoresist layer is between
approximately 1 to 2 μm thick.

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11. The system of claim 8 wherein the halo implant is at approximately a 45° angle.

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12. The system of claim 8 which includes the step of providing a lightly doped
drain implant before the halo implant providing step (b).

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13. The system of claim 9 wherein the active area comprises the source region and
the drain region of the semiconductor device.

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14. The system of claim 8 wherein the photoresist layer comprises a deep
ultraviolet (DUV) layer.